Definites in the Theory of Concept Types and Determination

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Semantic and typological perspectives on definites
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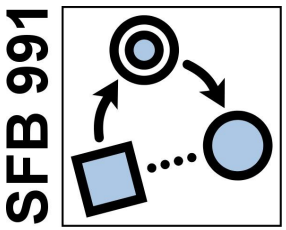


1. **Observations about definite descriptions**

2. **Concept types and determination**
   (In)definite determinations, (in)congruent uses

3. **Uses of Definites**
   Uses in the light of CTD, type e, semantic vs. pragmatic uses

4. **The scale of Definiteness**
   implicational scale in terms of uses

5. **Types of Evidence**
   Statistical, topological, historical, psycholinguistic, linguistic theories

1. Observations about definite descriptions

For languages with definiteness marking:

- There are certain conceptual types of nouns for which the definite article is — almost — obligatory.
- Certain types of definite NPs are usually not marked with a definite article, in particular, proper names and personal pronouns.
- There are splits of definiteness marking in almost all languages.
- In most cases, definite articles developed from demonstratives.
- *Semantic theory is preoccupied with anaphoric uses of definites.*

2. Concept types and determination

[–U]	[+U] **conceptually unique**	
sortal nouns describe their potential referents in terms of its properties *girl book water* ▸ unary predicate ▸ open number of referents	**individual concepts** describe their potential referents in terms of a functional relation to the situation *pope Jim she* ▸ description of an individual ▸ 1 referent	[–R]
relational concepts describe their potential referents in terms of a relation to a „possessor“ *uncle part kin* ▸ binary predicate ▸ open number of referents	**functional concepts** describe their potential referents in terms of a functional relation to a „possessor“ *mother mouth amount* ▸ unary function concept ▸ 1 referent per possessor	[+R] **conceptually relational**

Noun types and unmarked determination

[–U]	[+U] **conceptually unique**	
sortal nouns *girl book water* ✓ **indefinite** ✓ **absolute** logical type: <e,t>	**individual nouns** *pope Jo she* ✓ **definite** ✓ **absolute** logical type: <e>	[–R]
relational nouns *uncle part kin* ✓ **indefinite** ✓ **possessive** logical type: <e,<e,t>>	**functional nouns** *mother mouth amount* ✓ **definite** ✓ **possessive** logical type: <e,e>	[+R] **conceptually relational**

Noun types and determination: definite and possessive

[–U]	[+U] **conceptually unique**	
sortal nouns *girl book water* © **definite** © **possessive** logical type: <e,t>	**individual nouns** *pope Jo she* ✓ **definite** © **possessiv** logical type: <e>	[–R]
relational nouns *uncle part kin* © **definite** ✓ **possessive** logical type: <e,<e,t>>	**functional nouns** *mother mouth amount* ✓ **definite** ✓ **possessive** logical type: <e,e>	[+R] **conceptually relational**

Why noun type and mode of determination interact

- **The basic idea**
  Determination in terms of definiteness and relationality fixes the conceptual type of the NP token in its given context.
  - The distinction of conceptual types carries through all stages of formation and interpretation of nominals, from the lexical meaning to the NP token.
  - Definite determination means:
    “Construe the NP token as a conceptually unique description, i.e. as [+U] ! ”.
  - Indefinite determination means:
    “Construe the NP token as a sortal description, i.e. as [–U] ! ”.
  - Absolute determination means:
    “Construe the NP token as a non-relational description, i.e. as [–R] !”
  - Relative determination means:
    “Construe the NP token as a relational description, i.e. as [+R] !”

The type effect of simple modes of determination

mode of determination	resulting NP/DP type
simple indefinite (indefinite article, bare plural or mass noun)	[–U]
simple definite	[+U]
simple relational (without possessor specification)	[+R]
simple absolute	[–R]

Further modes of determination

Certain modes of determination require a CNP input of a certain type and deliver an NP of a different type:

mode of determination	input CNP type	output NP type
demonstrative	[–U]	[+U]
possessive determiner, derelativizer	[+R]	[–R]
possessive determiner +	[+R]	[–R][+U]

+ for argument NPs in languages where possessive determiners bar definite determination (e.g. German, English, but not Italian).

relativizer	[–R]	[+R]

CNP types and modes of determination

CNP = common noun phrase = operand of determination

- In principle, every mode of determination can be applied to every conceptual type of CNP. (The application may require grammatical adaptation, e.g. (de)relativizing.)

- The determination of an NP token is **congruent**, iff
  the conceptual type of the CNP matches the input requirement of the determination, if there is any, or else matches the conceptual type resulting from the determination.

  Otherwise, the determination of an NP token is **incongruent**.

- **Incongruent determination coerces conceptual type shifts**.

CNP types and congruent modes of determination

CNP type	congruent determination	
sortal	indefinite	absolute
individual	definite	absolute
relational	indefinite	possessive
functional	definite	possessive

CNP types and modes of determination coercing type shifts

CNP type	incongruent determination	
sortal	definite	possessive
individual	indefinite	possessive
relational	definite	absolute
functional	indefinite	absolute

The [–U] group of determinations (congruent with [–U] CNPs)

- **singular count**
  - indefinite article *a(n)*
  - singular count quantifiers *each*, *every*
- **plural, mass**
  - bare plural, bare mass
  - plural, mass with quantity specification: numerals, *many-much* etc.
  - definite plural, mass (!)
  - plural and mass quantifiers *all, both*
- **neutral**
  - unspecific indefinite *some*
  - free choice indefinite *any*
  - negative *no*
  - interrogative indefinite *which*
  - demonstrative (!)

The [+U] group of determinations (congruent with [+U] CNPs)

- definite article *the*

The [+R] group of determinations (congruent with [+R] CNPs)

- right possessive ____ *of* NP
- left possessive NP's ____
- possessive determiners *my*, *your*, …

The [–R] group of determinations (congruent with [–R] CNPs)

- Complete (maximal) argument NPs are [–R].

The distinction of concept type applies at every nominal level.

- **Nouns**
  The conceptual type of a noun, proper name, or pronoun is **lexically fixed** (modulo polysemy): The meaning of a sortal / relational / individual / functional [pro]noun is a concept of the respective type.

- **CNPs**
  When a CNP (common noun phrase = operand of determination) is formed, the noun may undergo a **shift of concept type**,
  - (overtly) by combination with modifiers
  - (overtly) by combination with argument specifications
  - (covertly) by application of a general meaning shift (e.g. metonymy)
  - (covertly) by adding contextual information

- **NPs** (the result of applying determination to a CNP)
  Simple determination (= definite / indefinite / possessive / absolute without further semantic content) **fixes the conceptual type of the NP token**. Determination may coerce a type shift of the CNP.

Levels of type shifts

Level 0	a. choice of lexical meaning variant	lexical semantics
	b. compositional modification: attributes, complements, adjuncts	compositional semantics
Level 1	general conceptual shifts applying across types of meanings (such as „artefact“, „institution“, „profession“, „attribute“, „property“)	dynamic lexicon
Level 2	enriching the concept for the referent of an NP by adding extralinguistic information	pragmatic enrichment

3. Uses of definites

3.1 **Congruent definite determination**: with individual and functional CNPs.
If the CNP is [+U], definite determination is semantically predictable / void for most argument NPs (i.e. those for which the predication entails existence).

individual concepts

With proper names and personal pronouns, definite determination is congruent, though implicit.
With individual concept nouns, definite determination is (mostly) explicit.

(1) ***The pope*** */ ©A* ***pope*** *will visit Switzerland in 2016.*

(2) *By 2030, the catholic church will have* ***a*** *different* ***pope*** */ *the different* ***pope****.*

functional concepts

(3) ***The mother*** */ ©A* ***mother*** *of Jimmy consulted the teacher*.

(4) *Every person has* ***a mother*** */ §the* ***mother****.*

(5) Definite associative anaphora (DAA)
I've bought a car, but something's wrong with ***the clutch*** [= of **the car**].

3. Uses of definites

3.1 Congruent definite determination: individual and functional CNPs

If the CNP is [+U], definite determination is semantically redundant.

- shifted CNPs = lexically [–U] sortal or relational noun
  plus a modifier that turns a [–U] concept into a [+U] concept, such as

level 0 shifts

- *only* (adnominal)
- superlatives, *last*, *next*, *favourite* (Partee & Borschev), ordinals
- [+U] appositions
  number 2, *word 'kinezumi'*, *rumour that …*
- autophoric DDs: SC with "establishing clause"
  computer I use in my office

level 1 shift →

- artefacts-in-exclusive-use-possessives
  my / *the toothbrush*, *computer*, *car*, *bed*, *flat*, …

3.2 Incongruent definite determination: with sortal and relational CNPs
If the CNP is [–U], definite determination is semantically functional;
it inevitably involves a type shift [–U] → [+U] (or: <e,t> → e).

- **deictic** use:

The deictic gesture maps the sort described by the [–U] CNP to an individual of the sort. Note that "what S points to" is a functional concept (here enriched with sortal information on the value). In many cases, a deictic gesture is not necessary.

level 2 shift ⟶

(5) *I hope **the beamer** will not break down during my talk.*

(6) *Would you pass me **the salt**, please?*

- **anaphoric** use: The definite determination requires the construal of the CNP concept as an individual concept. This is achieved by combining the sortal content of the CNP concept with a **functional link from the situation to the referent**. The functional link is retrieved from the information provided by the sentential context of the anaphora and the contextual information about the referent of the antecedent.

level 2 shift ⟶

(6) *Reinhold met a yeti. He took a picture of **the snowman**.*

construed individual concept:

"x such that:

x is a snowman, x is such that a picture can be taken of x,
(= anaphor sentential cotext)

and Reinhold met x; x is a yeti"
(= antecedent contextual information)

➔ a conceptually unique description, given that context

4. The scale of uniqueness / definiteness

PD pragmatic definites (achieved by level-2 shifts)

deictic definites
< anaphoric definites
< SC with establishing relative clause (autophoric definites)

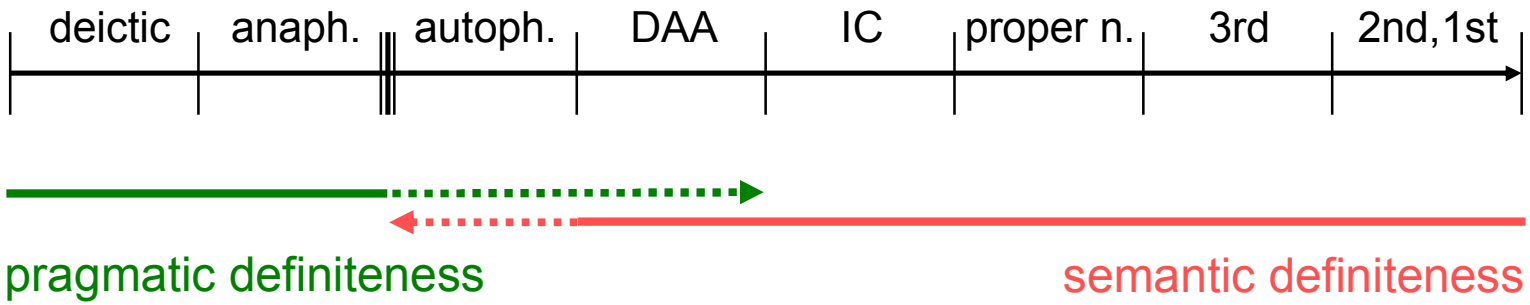
≤ definite associative anaphors (DAA)

≤ **SD semantic definites**

< lexical IC, enriched IC (SC with superlative, ordinal etc.)
< proper names
< 3rd person pronouns
< 2nd, 1st person pronouns

4. The scale of uniqueness / definiteness

Types of definite NPs



Grammatical distinctions

5. Evidence (1) – typological

- **Incongruent determination receives more salient marking.**
  - Incongruent uses are marked, while congruent uses are not.
  - Congruent uses receive reduced marking as opposed to incongruent uses.
  - Definiteness splits:
    > Existence of definiteness marking entails marking of pragmatic definiteness.
    > Certain types of semantically definites NPs are left unmarked.

> Talk by Ortmann (today, 10:15)

Evidence (2) – historical

- **Definite articles are expected to be grammaticalized from determiners that yield the NP concept type [+U].**

  Source 1:
  demonstrative determiners [–U] → [+U]
  - deictic distinctions are dropped (cf. anaphora)
  - later, input restriction to [–U] is dropped: marking extends to semantic definites

  Source 2:
  Possessive determination with pronominal possessor [+R] → [–R][+U]
  - relation to possessor is restricted and generalized
  - relation to possessor is dropped

  > Talk by Gerland (tomorrow, 15:35)

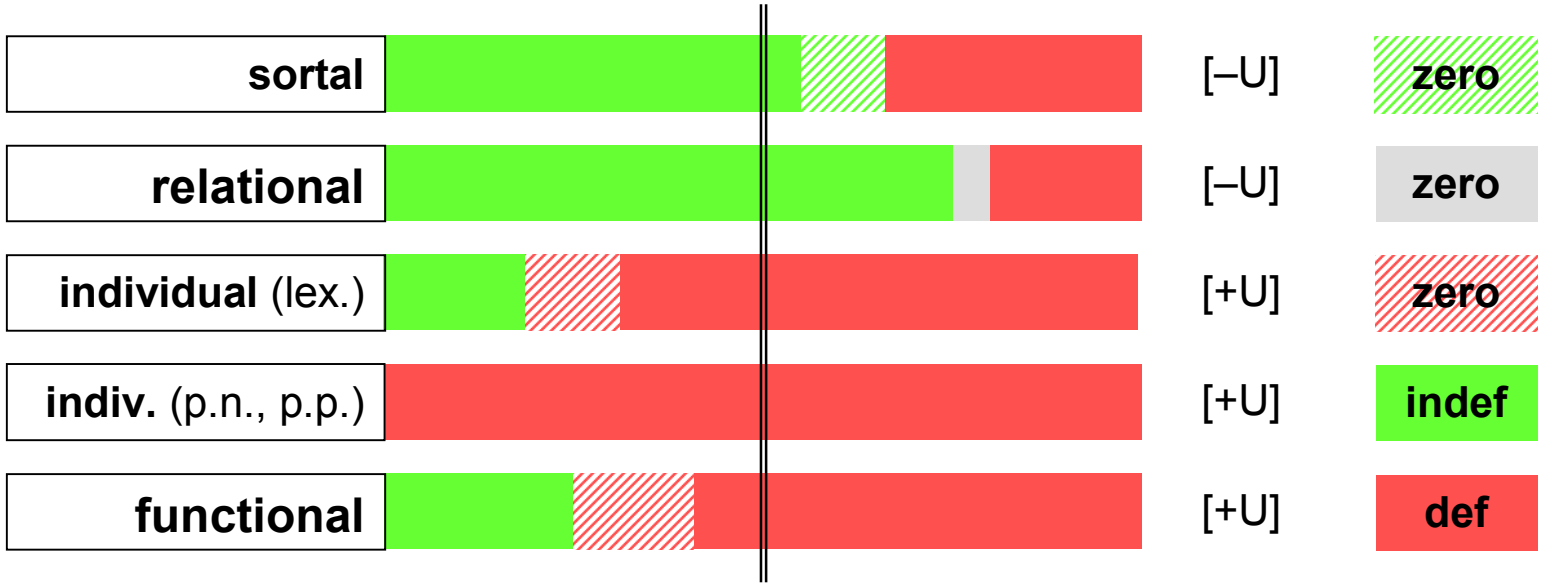
Evidence (3) – psycholinguistic

- **Incongruent determination requires more processing time, due to the type shift involved.**

  > Talk by Brenner (today, 16:45)

Evidence (4) – statistical

- **Incongruent uses of definite and indefinite determination are less frequent than congruent uses: lexical entries are arranged as to avoid type shifting.**



Incongruent ICs: lexical ICs > proper names > 3rd p.p. > 2nd, 1st p.p.

from: Horn & Kimm (to appear)

> Talk by Horn & Kimm (today, 16:00)

Evidence (5) – from linguistic theory

- **Linguistic description and theory is preoccupied with pragmatic definites**

  Most theories of definiteness focus on pragmatic definites because …

  … only with pragmatic definites, marking of definites is semantically nonredundant;

  … sortal nouns outnumber all other types of nouns within the class of general nouns which typically are combined with determiners. With sortal nouns, definiteness *is* pragmatic;

  … linguistic research has a strong bias towards written data where, with sortal nouns, anaphoric uses prevail;

  … in the European languages in the focus of linguistic research, definite articles developed from demonstratives that were originally restricted to pragmatic definiteness. Only gradually, their use was extended to semantically definite [+U] nominals, which still are only incompletely explicitly marked (witness bare definites). Many linguistic theories seem to follow this course of development by extending theories of anaphoric definites to definites in general (Behaghel 1923, Christophersen 1939, Heim 1982, Kamp 1981, Hawkins 1987, etc.).

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